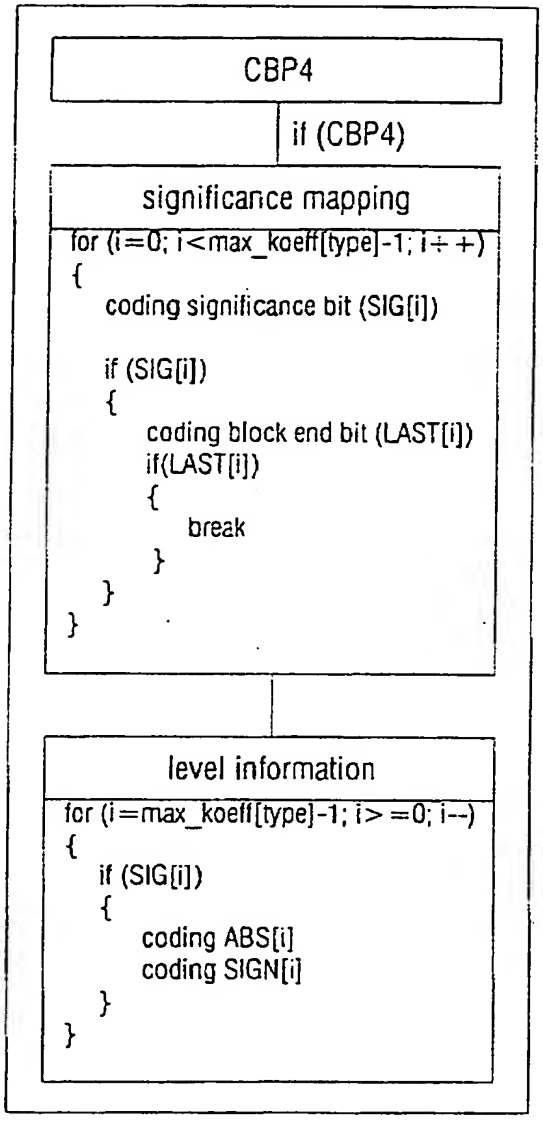
CBP4
if (CBP4)
significance mapping
for (i=0; i<max_koeff[type]-1; i++)
{
coding significance bit (SIG[i])
if (SIG[i])
{
coding block end bit (LAST[i])
if(LAST[i])
{
break
}
}
}
level information
for (i=max_koeff[type]-1; i>=0; i--)
{
if (SIG[i])
{
coding ABS[i]
coding SIGN[i]
}
}

FIG. 1

| coefficients | 14 | 0 | -5 | 3 | 0 | 0 | -1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIG | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | | | | | | | |
| LAST | 0 | | 0 | 0 | | | 0 | | 1 | | | | | | | |

| coefficients | 18 | -2 | 0 | 0 | 0 | -5 | 1 | -1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIG | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | (1) |
| LAST | 0 | 0 | | | | 0 | 0 | 0 | | | | | 0 | | | (1) |

FIG. 2

| ABS | binarization | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | unary part | | | | | | | | | | | | | | Exp-Golomb part | | | | | |
| 1 | 0 | | | | | | | | | | | | | | | | | | | |
| 2 | 1 | 0 | | | | | | | | | | | | | | | | | | |
| 3 | 1 | 1 | 0 | | | | | | | | | | | | | | | | | |
| 4 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | | | | |
| 5 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | | | |
| 6 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | | |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | | |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | | |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | | |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | | |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | | |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | | |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | | |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | | |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | | | | |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | | | |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | | | |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| bin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | ... |

FIG. 3

| block types | coefficient number | category |
|---|---|---|
| DC luminance block (INTRA 16x16-Mode) | 16 | 0: Luma-Intra 16-DC |
| AC luminance block (INTRA 16x16-Mode) | 15 | 1: Luma-Intra 16-AC |
| luminance block (INTRA 4x4-Mode) | 16 | 2: Luma-4x4 |
| luminance block (INTER-Mode) | 16 | |
| DC-chrominance-U-block (INTRA-Mode) | 4 | 3: Chroma-DC |
| DC-chrominance-V-block (INTRA-Mode) | 4 | |
| DC-chrominance-U-block (INTER-Mode) | 4 | |
| DC-chrominance-V-block (INTER-Mode) | 4 | |
| AC-chrominance-U-block (INTRA-Mode) | 15 | 4: Chroma-AC |
| AC-chrominance-V-block (INTRA-Mode) | 15 | |
| AC-chrominance-U-block (INTER-Mode) | 15 | |
| AC-chrominance-V-block (INTER-Mode) | 15 | |

FIG. 4

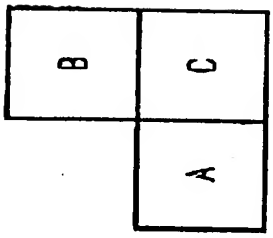


FIG. 5

| coefficients | 14 | 0 | -5 | 3 | 0 | 0 | -1 | 0 | 1 |
|---|---|---|---|---|---|---|---|---|---|
| ctx_number_abs_1bin | 4 | | 4 | 2 | | 1 | | 0 | |
| ctx_number_abs_rbins | 2 | | 1 | 0 | | | | | |

reversed scan direction

| coefficients | 18 | -2 | -1 | 6 | 4 | -5 | 1 | -1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ctx_number_abs_1bin | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | | 2 | | | 1 | | | 0 |
| ctx_number_abs_rbins | 4 | 3 | | 2 | 1 | 0 | | | | | | | | | | |

FIG. 6